

**Below are a list of journal and conference publications either fully or partially funded by the CERES experiment as part of NASA's Earth Observing System**

## CERES Recent Publications

### Journal Articles

#### 2001

Chambers, L. H., B. A. Wielicki, and Norman G. Loeb: Shortwave Flux from Satellite-Measured Radiance: A Theoretical Study over Marine Boundary Layer Clouds, accepted to Journal of Applied Meteorology, May, 2001.

Clarke, A., W. D. Collins, P.J. Rasch, V. Kapustin, K. Moore, and S. Howell, 2001: Pollution transport on global scales: Measurements and model predictions. In press, J. Geophys. Res.

Collins, W.D., P.J. Rasch, B.E. Eaton, B.V. Khattatov, J.-F. Lamarque, and C.S. Zender, 2001: Simulating aerosols using a chemical transport model with assimilation of satellite aerosol retrievals: Methodology for INDOEX. J. Geophys. Res., vol. 106, 7313--7336.

Donner, L.J., C.J. Seman, R.S. Hemler, and S. Fan, 2001: A cumulus parameterization including mass fluxes, convective vertical velocities, and mesoscale effects: Thermodynamic and hydrological aspects in a general circulation model. {J. Climate,}

Frisch, S., B. Martner, I. Djalalova, M. Poellot: Comparisons of Radar/Radiometer Retrievals of Stratus Cloud Liquid Water Content Profiles with in situ Measurements by Aircraft, Journal of Geophysical Research, 105, 15361-15364.

Frisch, S., M. Shupe, I. Djalalova, G. Feingold, M. Poellot: On the Retrieval of Effective Radius with Cloud Radars, Journal of Atmospheric and Oceanic Technology, submitted.

Haeffelin, M., S. Kato, A. Smith, K. Rutledge, T. P. Charlock, and J. R. Mahan, 2001: Determination of the thermal offset of the Eppley precision spectral pyranometer, Appl. Opt., 40, 472-484.

Han, Q., J. B. Rossow, J. Zeng and R. Welch, 2001: Satellite remote sensing of the liquid water sensitivity in water clouds, Submitted to J. Atmos. Sci.

Hu, Y., D. Winker, P. Yang, B. A. Baum, L. Poole, and L. Vann: Identification of cloud phase from PICASSO-CENA lidar depolarization: A multiple scattering sensitivity study. In press, J. Quant. Soc. Rad. Trans.

Intrieri J. M., M. D. Shupe, T. Uttal, B. J. McCarty: An Annual Cycle of Arctic Cloud Characteristics Observed by Radar and Lidar at SHEBA, JGR, SHEBA Special Issue, 2001.

Intrieri, J. M., C. W. Fairall, M. D. Shupe, P. O. G. Persson, E. L. Andreas, P. S. Guest, R. E. Moritz: An Annual Cycle of Arctic Surface Cloud Forcing at SHEBA , JGR, SHEBA Special Issue, 2001.

Kanmitsu, M, W. Ebisuzaki, J. Wollen, S-K Yang, J.J Hnilo, M. Fiorino and G.L. Potter; 2001: NCEP/DOE AMIP-II Reanalysis (R-2), Submitted to Bull. Amer. Meteo. Soc.

Key, J. R., P. Yang, B. A. Baum, and S. L. Nasiri: Parameterization of shortwave ice cloud optical properties for various particle habits. Submitted to J. Geophys. Res. 2001.

Kratz, D. P., K. J. Priestley and R. N. Green: Establishing the Relationship between the CERES Total and Window Channel Measured Radiances for Conditions Involving Deep Convective Clouds at Night, submitted for publication in JGR, March 2001.

Lin, X., L. D. Fowler, and D. A. Randall, 2001: Flying the TRMM satellite in a GCM. Submitted to Journal of Geophysical Research.

Loeb, N. G., K. J. Priestley, D. P. Kratz, E. B. Geier, R. N. Green, B. A. Wielicki, P. O'Rawe-Hinton, S. K. Nolan: Determination of Unfiltered Radiances from the Clouds and the Earth's Radiant Energy System (CERES) Instrument, JAM, 40, 822--835, 2001.

Nasiri, S. L., B. A. Baum, A. J. Heymsfield, P. Yang, M. R. Poellet, D. P. Kratz and Y. Hu; The Development of Midlatitude Cirrus Models for MODIS Using FIRE-I, FIRE-II, and ARM In-Situ Data, accepted by the JAM, March 2001.

Ramanathan, V., P.J. Crutzen, J. Lelieveld, D. Althausen, J. Anderson, M.O. Andreae, W. Cantrell, G. Cass, C.E. Chung, A.D. Clarke, W.D. Collins, J.A. Coakley, F. Dulac, J. Heintzenberg, A.J. Heymsfield, B. Holben, J. Hudson, A. Jayaraman, J.T. Kiehl, T.N. Krishnamurti, D. Lubin, A.P. Mitra, G. McFarquhar, T. Novakov, J.A. Ogren, I.A. Podgorny, K. Prather, J.M. Prospero, K. Priestley, P.K. Quinn, K. Rajeev, P.J. Rasch, S. Rupert, R. Sadourney, S.K. Satheesh, P. Sheridan, G.E. Shaw, and F.P.J. Valero, 2001: The Indian Ocean Experiment: An integrated assessment of the climate Forcing and effects of the great Indo-Asian haze. In press, J. Geophys. Res.

Rasch, P.J., W. D. Collins and B.E. Eaton, 2001: Understanding the Indian Ocean Experiment (INDOEX) aerosol distributions with an aerosol assimilation. J. Geophys. Res., vol. 106, 7337--7356.

Shupe, M. D, T. Uttal, S. Y. Matrosov, A. S. Frisch: Cloud Water Contents and Hydrometeor Sizes During the FIRE-Arctic Clouds Experiment, JGR, FIRE-ACE Special Issue, 2001.

Uttal, T. and 26 co-Authors ; The Surface Heat Budget of the Arctic Ocean, Bulletin of the American Meteorological Society, submitted.

Yang, P., B.-C. Gao, B. A. Baum, Y. X. Hu, W. Wiscombe, M. I. Mishchenko, D. M. Winker, and S. L. Nasiri, 2000: Asymptotic solutions of optical properties of large particles with strong absorption. *Applied Optics*, 40, 1532-1547. (Published 2001)

Yang, P., B.-C. Gao, B. A. Baum, W. Wiscombe, Y. Hu, S. Nasiri, A. Heymsfield, G. McFarquhar, and L. Miloshevich, 2000: Sensitivity of cirrus bidirectional reflectance to vertical inhomogeneity of ice crystal habits and size distributions. *In press, J. Geophys. Res.* (In Press 2001)

Yang, P., B.-C. Gao, B. A. Baum, Y. X. Hu, W. J. Wiscombe, S.-C. Tsay, and D. M. Winker: Radiative properties of cirrus clouds in the infrared (8-13 mm). *In press, J. Quant. Soc. Rad. Trans.*

## 2000

Andronache, C., L.J. Donner, C.J. Seman, and R.S. Hemler, 2000: A study of the impact of ITCZ on aerosols during INDOEX. *Submitted to J. Geophys. Res.*

Cess, R. D., M. Zhang, B. A. Wielicki, D. F. Young, X-L. Zhoou, and Y. Nikitenko: The influence of the 1998 El Nino upon cloud-radiative forcing over the Pacific warm pool, *J. Climate* (in press).

Cess, R. D., T. Qian, and M. Sun: Consistency tests applied to the measurement of total, direct and diffuse shortwave radiation at the surface, *JGR-Atmospheres* (in press).

Chambers, L. H., P. Kay Costulis, D. F. Young, C. J. Green, D. B. Stoddard, and S. J. Haberer: What is Success? Evaluating S'COOL, an Educational Outreach Project Focused on NASA's CERES Program, *EOS, Transactions, American Geophysical Union*, Vol. 81, No. 48, p. F302, November 28, 2000.

Christopher, S.A., X. Li, R. M. Welch, J. S. Reid, P. V. Hobbs, T. F. Eck and B. Holben, 2000: Estimation of surface and top-of-atmosphere shortwave irradiance in biomass-burning regions during SCAR-B, *J. Appl. Meteor.* 39, 1742-1753.

Christopher, S. A., J. Chou, J. Zhang, X. Li, T. A. Berendes and R. M. Welch, 2000: Shortwave direct radiative forcing of biomass aerosols estimated using VIRS and CERES data, *JGR Letters*, 27, 2197-2200.

Collins, W. D., P.J. Rasch, B.E. Eaton, D.W. Fillmore, J.T. Kiehl, T.C. Beck, and C.S. Zender, 2000e: Simulation of aerosol distributions and radiative forcing for INDOEX: Regional climate impacts. *Submitted to J. Geophys. Res.*

Dong, X., G.G.Mace, P.Minnis, and D.F.Young, 2000: Arctic Stratus Cloud Properties and Their Effect on the Surface Radiation Budget: Selected Cases from FIRE ACE. *JGR FIRE special issue* (paper #2000JD900404). *In press.*

Dong, X., P. Minnis, T. P. Ackerman, E. E. Clothiaux, G. G. Mace, C. N. Long, and J. C. Liljegren, 2000: A 25-month Database of Stratus Cloud Properties Generated from Ground-based Measurements at the ARM SGP Site. *J. Geophys. Res.* 105, 4529-4538.

Donner, L.J., C.J. Seman, R.S. Hemler, and S. Fan, 2000: A cumulus parameterization including mass fluxes, convective vertical velocities, and mesoscale effects: Thermodynamic and hydrological aspects in a general circulation model. Undergoing revision for *J. Climate*.

Duvel, J.-Ph., and P. Raberanto, 2000 : A geophysical cross-calibration approach for broadband channels: Application to the ScaRaB experiment, *J. Atmos. Oceanic Technol.* (in press)

Duvel, J.-Ph., S. Bouffiès-Cloché and M. Viollier, 2000: Determination of Shortwave Earth Reflectances from visible radiance measurements: Error estimate using ScaRaB data, *J. of Appl. Meteor*, 39, 957-970.

Fowler, L. D., B. A. Wielicki, D. A. Randall, M. D. Branson, G. G. Gibson, and F. M. Denn, 2000: Use of a GCM to explore sampling issues in connection with satellite remote sensing of the Earth's radiation budget. *J. Geophys. Res.*, 105, 20757-20772.

Haeffelin, M., S. Kato, T. P. Charlock, A. Smith, K. Rutledge, and J. R. Mahan, 2000; Determination of the thermal offset of the Eppley precision spectral pyranometer, *Appl. Optics*, in press.

Haeffelin, M., S. Kato, A. M. Smith, K. Rutledge, T. Charlock, and J. R. Mahan, 2000: Determination of the thermal offset of the Eppley Precision Spectral Pyranometer. Submitted to *Appl. Opt*

Han, Q. Y., W. B. Rossow, J. Chou, and R. M. Welch, 2000a: Three Different Behaviors of Liquid Water Path of Water Clouds in Aerosol-Cloud Interactions. [Submitted to *J. Atmos. Sci.*, and revised]

Han, Q. Y., W. B. Rossow, J. Chou, K. Kuo, and R. M. Welch, 2000: Near-global survey of cloud susceptibilities using ISCCP data. *Geophys. Res. Letts.*, 27, 3221-3224.

Ignatov, A. and L. L. Stowe, 2000: Physical Basis, Premises, and Self-consistency checks of Aerosol Retrievals from TRMM/VIRS. Accepted *Jrnal Appl. Meteor*.

Kato, S., G. G. Mace, E. E. Clothiaux, and J. C. Liljegren, 2000: Doppler cloud radar derived drop size distributions in liquid water stratus clouds, submitted to *J. Atmos. Sci.*

Kato, S., G. G. Mace, E. E. Clothiaux, J. C. Liljegren, and R. T. Austin, 2000: Doppler cloud radar derived drop size distributions in liquid water stratus clouds, *J. Atmos. Sci.* accepted for publication.

Kato, S. and G. L. Smith, 2000; Computation of the domain averaged irradiance by the discrete ordinate radiative transfer algorithm, submitted to J. Atmos. Sci.

Kato, S., G. L. Smith, and H. W. Barker, 2000: Gamma-weighted discrete ordinate two-stream approximation for computation of domain aeraged solar irradiance, J. Atmos. Sci. accepted for publication.

Li, X., S. A. Christopher, J. Zhang, J. Chou, K-S. Kuo, R. M. Welch, J. S. Reid, T. F. Eck, S-K. Yang and B. N Holben, 2000: Single scattering albedo of smoke aerosols estimated from NOAA-14 AVHRR measurements, submitted for publication.

Li, X., S. A. Christopher, J. Chou and R. M. Welch, 2000: Estimation of shortwave direct radiative forcing of biomass burning aerosols using new angular models, J. Appl. Meteor., 39, 2278-2291.

Liljegren, J. C., E. E. Clothiaux, G. G. Mace, S. Kato, and X. Dong, 2000: Retrieval of cloud liquid water path, J. Geophys. Res. in press.

Lin, X., D. A. Randall, and L. D. Fowler, 2000: Diurnal variability of the hydrologic cycle and radiative fluxes: Comparisons between observations and a GCM. Journal of Climate, 13, 4159-4179.

Lin, X., D. A. Randall, and L. D. Fowler, 2000: Simulation of the diurnal cycle of convection and a comparison with TRMM data. J. Climate (in press).

Loeb, N.G., K.J. Priestley, D.P. Kratz, E.B. Geier, R.N. Green, B.A. Wielicki, P. O'R. Hinton, and S.K. Nolan, 2000: Determination of unfiltered radiances from the Clouds and the Earth's Radiant Energy System (CERES) instrument. J. Appl. Meteor. (in press)

O'Neill, N., A. Ignatov, B. Holben and T. Eck, 2000: The log-normal distribution as a reference for reporting aerosol optical depth statistics: Empirical tests using multi-year, multi-site AERONET sun-photometer data. Accepted Geophysical Research Letters.

Randall, D. A., M. E. Schlesinger, V. Galin, V. Meleshko, J.-J. Morcrette, and R. Wetherald, 2000: Cloud Feedbacks. In "Frontiers in the Science of Climate Modeling," J. T. Kiehl and V. Ramanathan, Eds., Cambridge University Press. Submitted for publication.

Randall, D. A., J. Curry, P. Duynkerke, S. Krueger, M. Miller, M. Moncrieff, B. Ryan, D. Starr, W. Rossow, G. Tselioudis, and B. Wielicki, 2000: The GEWEX Cloud Systems Study Second Science and Implementation Plan. IGPO Publication Series No. 34, 45 pp.

Redelsperger, J.L., P.R.A. Brown, F. Guichard, C. Hoff, M. Kawasima, S. Lang, Th. Montmerle, K. Saito, C. Seman, W.K. Tao, and L.J. Donner, 2000: A GCSS model intercomparison for a tropical squall line observed during TOGA-COARE. Part I: Cloud-resolving models. { Quart. J. Roy. Meteor. Soc.,} {126,} 823-864.

Satheesh, S. K. and V. Ramanathan: Large Difference in Tropical Aerosol Forcing at the Top of the Atmosphere and Earth's Surface, *Nature*, 405, 60-63, 2000.

Standfuss, C., M. Viollier, R. S. Kandel, and J. Ph. Duvel, 2000: Regional Diurnal Albedo Climatology and Diurnal Time Extrapolation of Reflected Solar Flux Observations. Application to the ScaRaB record, *Journal of Climate*, in press.

Wilcox, E. M. and V. Ramanathan (2000): Scale Dependence of the Thermodynamic Forcing of Tropical Monsoon Clouds: Results from TRMM Observations, *J. Climate*, in press, 2000.

Wong, T., D. F. Young, M. Haeffelin, and S. Weckmann, 2000: The Validation of the CERES/TRMM ERBE-like Monthly-mean Clear-sky Longwave Dataset and the Effects of the 1998 ENSO Event. *J. Climate*, In press.

Tian, B., and V. Ramanathan, 2000: Tropical Cloud Radiative Forcing and the Large-scale Atmospheric Energy Transport. Submitted to *J. Climate*, Oct. 2000.

Zhou, Y. P. and R. D. Cess: Validation of longwave atmospheric radiation models using Atmospheric Radiation Measurements (ARM) data, *JGR-Atmospheres* (in press).

Zhou, Y. and R. D. Cess: Algorithm-development strategies for retrieving the downwelling longwave flux at the Earth's surface, *JGR-Atmospheres* (submitted).

## Conference Papers

### 2001

Berendes, T. A., R. M. Welch, U. S. Nair, and D. A. Berendes, 2001: Interactive Visualizer and Image Classifier for Satellites (IVICS), 2001: AGU, Boston, 29 May-2 June.

Collins, W. D., 2001: Aerosol assimilation in a GCM. Invited presentation, Twenty-third CERES Science Team Meeting, NASA Langley Research Center, Jan. 23--25, 2001, Hampton, Virginia.

Collins, W. D., 2001: Modeling of aerosols with assimilation of satellite and surface aerosol observations. Invited presentation, Geophysical Fluid Dynamics Laboratory, Princeton University, Apr. 5, 2001, Princeton, New Jersey.

Friedman, M. A., and J. A. Coakley, Jr.: Retrieval of pixel-scale cloud properties for overcast and partly cloudy regions over ocean. Spring Meeting AGU, 29 May-2 June 2001, Boston.

Han, Q., J. Chou, T. Berendes and R. Welch, 2001: Discriminating dust and clouds using AVHRR data, American Meteor. Soc. 81st Annual Meeting, Albuquerque, NM, 14-19 Jan.

Han, Q., J. Chou, J. Zeng and R. M. Welch, 2001: Viewing geometry effect on cloud droplet size retrievals, IGARS2001, Sydney, July.

Han, Q., W. B. Rossow, J. Zeng and R. M. Welch, 2001: Satellite remote sensing of liquid water sensitivity in water clouds, IGARS2001, Sydney, July.

Lin, Bing, Patrick Minnis, Alice Fan, Thomas Charlock, David Young, and Yongxiang Hu, 2001: THE SURFACE AND TOA HEAT BUDGETS OVER TROPICAL OCEANS OBSERVED BY TRMM SATELLITE. 11th Conf. on interaction of the sea and atmosphere, AMS, San Diego, California, May 14-18, 2001.

Lin, Bing, Patrick Minnis, Alice Fan, and David Young, 2001: ESTIMATION OF COLUMN WATER AMOUNTS OVER ARCTIC REGIONS USING GROUND-BASED THERMAL MICROWAVE AND INFRARED MEASUREMENTS. 11th Symposium on Meteorological observations and instrumentation, Albuquerque, New Mexico, Jan. 14-18, 2001.

Orr, B. W., T. Uttal: Microwave Radiometer Observations of Integrated Atmospheric Water Vapor and Cloud Liquid Water at SHEBA and ARM's NSA Site Using New Absorptions Models, Sixth Conf. on Polar Meteorology and Oceanography, San Diego, CA, May, 2001.

Ramachandran, R., U. S. Nair, S. Graves, S. Tanner, R. Welch and J. A. Rushing, 2001: Comparing texture feature characterization methods for cumulus cloud classification in GOES images. Third Workshop on Mining Scientific Datasets, First SIAM Conference on Data Mining, 7 April, Chicago.

Shupe, M. D., T. Uttal, S. Y. Matrosov, A. S. Frisch, B. W. Orr: Radar-based Retrievals of Cloud Properties in the Arctic and New Results from SHEBA, Eleventh ARM Science Team Meeting Proceedings, Atlanta, Georgia, March 19-23, 2001.

Trepte, Q., R. F. Arduini, Y. Chen, S. Sun-Mack, P. Minnis, D. Spangenberg, D. R. Doeling, 2001: Development of a Daytime Polar Cloud Mask Using Theoretical Models of Near-Infrared Bidirectional Reflectance for ARM and CERES, Proc. AMS 6th Conf. on Polar Meteorology and Oceanography, San Diego, CA, May 14 - May 18, 242 - 245.

Uttal, T.: Comparison of SHEBA and NSA Cloud Properties for April, May, June, and July, Sixth Conf. on Polar Meteorology and Oceanography, San Diego, CA, May, 2001.

Yang, S. K., M. Kanamitsu, A. J. Miller and W. Ebisuzaki, 2001 Interdecadal Trends of OLR and Relative Humidity from NCEP/NCAR Reanalysis. Decadal Climate Variability Workshop, NASA-IPRC-CLIVAR Honolulu, Hawaii, USA. Jan 8-12, 2001

## 2000

Andronache, C., L. J. Donner, C. J. Seman, and R. S. Hemler, 2000: A model study of aerosol removal in ITCZ convective systems. {Abstracts, AGU Fall Meeting} F151.

Barkstrom, B. R., B. A. Wielicki, G. L. Smith, R. B. Lee, K. J. Priestley, and T. P. Charlock, 2000: Validation of CERES/Terra data. Conf. on Sensors, Systems and Next Generation Satellites VI, EOS/SPIE Symposium on Remote Sensing. Barcelona, Spain, 25-29 Sept.

Capderou, Michael, and Michel Viollier: Impact of new desert angular directional models on the determination of the shortwave reflected flux. International Radiation Symposium, IRS2000 St.-Petersburg July 24-29, 2000

Chambers, Lin H., David F. Young, Carolyn J. Green, Susan J. Haberer, and Anne M. Racel,: The CERES S'COOL Project: Two Years After First Launch, invited to the 9th Symposium on Education, American Meteorological Society, January, 2000, Long Beach, CA.

Chambers, Lin H. and Sally McFarlane: Non Plane-parallel clouds: Statistics from the Atmospheric Radiation Measurement Program, Presented at the 2nd Gordon Research Conference on Solar Radiation & Climate, Connecticut College, NH, June 24-29, 2000.

Charlock, T. P., D. Rutan, and F. G. Rose, 2000: Preliminary CERES Retrievals Compared with ARM Data. Poster at Tenth ARM Science Team Meeting, March 13-17, San Antonio, Texas.

Charlock, T. P., F. G. Rose, D. A. Rutan, and Q. Fu, 2000: Retrievals of the Surface and Atmospheric Radiation Budget for January 1998: (a) Validation with Collocated Observations and (b) Some Insights on Low Latitude Atmospheric Energetics and Circulation. Oral presentation at International Radiation Symposium (IRS-2000), 24-29 July, St. Petersburg, Russia.

Clarke, A. D., W. D. Collins, P. J. Rasch, V. N. Kapustin, K. Moore, and S. Howell: 2000: Pollution transport on global scales: Measurements from PEMT-B confirm model predictions. 2000 Spring Meeting, American Geophysical Union. EOS, vol. 81 (no. 19), p. S118.

Collins, W. D., P. J. Rasch, B. E. Eaton, D. W. Fillmore, J. T. Kiehl, and C. S. Zender: 2000: Simulation of aerosol distributions and radiative forcing for INDOEX. XXV General Assembly, European Geophysical Society. EGS Newsletter, vol. 74, p. 189.

Collins, W. D., A. D. Clarke, P. J. Rasch, K. Moore, and V. Kapustin, 2000: Analysis of the PEMT pollution event on April 10, 1999 using an aerosol assimilation model. 2000 Spring Meeting, American Geophysical Union. EOS, vol. 81 (no. 19), p. S127.

Collins, W. D., and P. J. Rasch, 2000: Assimilation of atmospheric aerosol observations. Invited presentation, 2000 Spring Meeting, American Geophysical Union. EOS, vol. 81 (no. 19), p. S98.

Collins, W. D., 2000: Sources of uncertainty in climate-change simulations from coupled climate models. Invited presentation, 2000 Fall Meeting, American Geophysical Union. EOS, vol. 81 (no. 48), p. F21.

Collins, W. D., P. J. Rasch, E. J. Welton, C. T. Beck, and J. S. Spinharne, 2000: Assimilation of space-based aerosol lidar measurements for studying African dust: Methodology. 2000 Fall Meeting, American Geophysical Union. EOS, vol. 81 (no. 48), p. F70.

Collins, W. D., 2000: Simulation of aerosol effects on the climate system: Future directions for the CAM. NCAR CSM Workshop, un. 27--29, 2000, Breckenridge, Colorado.

Collins, W. D., P. J. Rasch, and B. E. Eaton, 2000: Assimilation of atmospheric aerosol observations. Invited presentation, University of Utrecht, Sep. 12, 2000, Utrecht, The Netherlands.

Donner, L. J., and C. J. Seman, 2000: The impact of deep convection on large-scale cloud and tracer fields in the general circulation. {Abstracts, AGU Fall Meeting} F155.

Fowler, L. D., and D. A. Randall, 2000: The second generation of cloud microphysics and fractional cloudiness in the CSU general circulation model. Paper presented at the 13th International Conference on Clouds and Precipitation, 14-18 August 2000, Reno, Nevada.

Green, Carolyn J., and Lin H. Chambers: NASA and Students Work Together For Mutual Benefit and Research, International Astronautical Federation (IAF) Symposium, Alsace, France, April 2-4, 2000

Green, Carolyn J., and Lin H. Chambers: NASA's S'COOL Provides The Teachable Moment for The New Millennium's Wide Range of Learners, International Geoscience and Remote Sensing Society, Honolulu, HI, July 24-July 29, 2000.

Haeffelin M., Bruce Wielicki, Kory Priestley, Jean Philippe Duvel, and Michel Viollier: Direct comparisons of radiances measured by independent contemporary ERB instruments. International Radiation Symposium, IRS2000 St.-Petersburg July 24-29, 2000

Han, Q., W. B. Rossow, J. Chou, and R. M. Welch, 2000b: Strategies of Monitoring Aerosol Indirect Effect from Space. NPOESS workshop, Oct. 13-14, Princeton, NJ.

Ignatov, A. and L.L. Stowe, 2000: Towards Improved Operational Aerosol Retrievals from AVHRR -LIKE satellite sensors. Spring AGU Meeting, Washington, DC

Inamdar, A.K., and V. Ramanathan, 2000: An observational assessment of water vapor absorption in the continuum and non-window spectral regions: Applications to climate feedback studies. To be presented at the Fall Meeting of the American Geophysical Union, Eos supplement, December 2000.

Kato, S., G. G. Mace, E. E. Clothiaux, and J. C. Liljegren, 2000: 35-ghz doppler radar and microwave radiometer derived size distributions of stratus clouds, the International Radiation Symposium, St. Petersburg, Russia, 24-29 July 2000.

Loeb, N.G., F. Parol, J.-C. Buriez, and C. Vanbause, 2000: Top-of-atmosphere albedo estimation from angular distribution models using scene identification from satellite cloud property retrievals. *J. Climate*, 13, 1269-1285.

Ramanathan, V., S.K. Satheesh, and A. Vogelmann: Tropical Aerosol Forcing from INDOEX and ARM-SGP, ARM meeting, March, 13-17, Texas, 2000.

Ramanathan, V. 2000: Water Vapor Feedback. Invited paper, European Geophysical Society, April 2000, Nice, France

Ramanathan, V., M. O. Andreae, J. Anderson, G. Cass, T. Clarke, W. D. Collins, J. Coakley, B. Gandrud, A. Heymsfield, A. Jayaraman, J. T. Kiehl, J. Ogren, J. Prospero, T. Novakov, and K. Prather, 2000: The Indian Ocean Experiment: An overview of the aerosol climate forcing with implications to climate change. XXV General Assembly, European Geophysical Society. EGS Newsletter, vol. 74, p. 189.

Randall, D. A., 2000: A modeler's view of the Earth's radiation budget. Paper presented at the International Radiation Symposium, St. Petersburg, Russia, 24 to 29 July 2000. (Invited paper)

Randall, D. A., 2000: Modeling the global atmospheric hydrologic cycle. Paper presented at Earth, Sea and Sky: Mathematical Modeling in the Earth Sciences. A Symposium Sponsored by the American Association for the Advancement of Science. February 2000. Randall, D. A., 2000: Cumulus convection and climate. Paper presented at the Fall AGU meeting, San Francisco. (Invited paper).

Rasch, P. J., and W. D. Collins, 2000: The modulation of constituent transport by important transient features of the general circulation. 2000 Spring Meeting, American Geophysical Union. EOS, vol. 81 (no. 19), p. S154.

Rasch, P. J., W. D. Collins, and D. Winker, 2000: Assimilation of space-based aerosol lidar measurements for studying African dust: Results. 2000 Fall Meeting, American Geophysical Union. EOS}, vol. 81 (no. 48), pp. F43--F44.

Stoddard, Douglas B., and Lin H. Chambers: NASA CERES S'COOL Project has the Angle on Student Observers as Scientists, American Geophysical Union, Washington, DC, May, 2000.

Stowe, L.L. and T.X.-P Zhao, 2000: Global Oceanic Validation of the NOAA/NESDIS Second Generation Aerosol Retrieval Algorithm with AERONET Sun-Photometer Observations, Proceedings International Radiation Symposium, St. Petersburg, Russia, July 24-29.

Wong, T., B. A. Wielicki, D. F. Young 2000: Decadal Variability in Tropical Broadband Radiation Budget. 12th Symposium on Global Change Studies and Climate Variations, 14-19, January 2001, Albuquerque, New Mexico, American Meteorological Society, Submitted.

Xie, P-P, J. Janowiak, P.A. Arkin and S-K Yang, 2000: Diurnal Variation of Outgoing Longwave Radiation: Preliminary Results Based on Harmonica Analysis of the ERBE Observation. AMS 10th Conf. on Satellite Meteorology, Long Beach, CA 9-14 January 2000.

Yang, S.-K., M. Kanamistu, A.J. Miller and W. Ebisuzaki:2000: Interdecadal Trend of the Earth Radiation Budget from NCEP/NCAR Reanalysis., Current problems in Atmospheric Radiation. International Radiation Symposium, St. Petersburg, July 24-29, 2000.

Yang, S.-K. 2000: Cloud and Earth Radiation Energy System (CERES): Project and Applications: Recent Development of Atmospheric Radiation and Remote Sensing Workshop. National Taiwan University, Taipei, Taiwan, Jan 6~7, 2000.

Yang, S.-K., 2000: Utilizing CERES/ERBE Measurements for the Validation of NCEP Global Forecast Systems and Reanalysis: Recent Development of Atmospheric Radiation and Remote Sensing Workshop. National Taiwan University, Taipei, Taiwan, Jan 6~7, 2000.

Zhao, X.-P. and L.L. Stowe, 2000: Global Validation of the NOAA/NESDIS Second Generation Aerosol Retrieval Algorithm with AERONET Data. Intl. Geoscience and Remote Sensing Symposium, Honolulu Hawaii